

facilities (n=42). Records review and group interviews were used to collect the required data.

Results: The study found that the TB control programme in Khartoum state achieved a 77.2% case detection rate of the smear positive cases, and 73.5% treatment success rate, and a case fatality of 2.2%, treatment failure rate of 2.2%, and default rate of 14.1%. There was no system to detect the prevalence of MDR-TB (Multi Drug Resistant TB) or HIV (Human Immunodeficiency Virus) among the TB cases. The program was not well implemented at locality or health area levels. Conversely, drugs and laboratory supply systems were functioning well.

Conclusion: The tuberculosis control programme in Khartoum state is centralized, not updated, and does not achieve the targeted goals.

OL-004 Evaluation of TB Ag MPT64 Rapid kit for identification of *Mycobacterium tuberculosis* from mycobacterial cultures grown in liquid and solid media in the areas with high prevalence of tuberculosis

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Rapid and accurate identification of *Mycobacterium tuberculosis* from cultures grown in liquid and solid media has been of great value in clinical mycobacteriology laboratory. Recently, a TB Ag MPT64 Rapid kit becomes available commercially for such purposes, but has not been fully evaluated in the areas with high prevalence of tuberculosis. This study was, therefore, initiated to determine accuracy of the kit in a clinical mycobacteriology lab in the Philippines using 194 cultures including 148 cultures grown in the MB/BacT liquid culture system and 46 cultures grown in LJ media. PCR was used to determine *M. tuberculosis* and non-tuberculous mycobacteria (NTM), and of 194 cultures, 186 (95.9%) were *M. tuberculosis* and 8 (4.1%) were NTM. Of 186 *M. tuberculosis* cultures, 178 (95.7%) were positive by the rapid kit, and all 8 NTM cultures were negative by the kit, resulting in overall agreement of 95.9%. When the results were analyzed by culture methods, the kit showed positivity in 136 (95.1%) of 143 *M. tuberculosis* grown in liquid media and negativity in all 5 NTM cultures, thus resulting in agreement rate of 95.3%. In contrast, the kit showed positive results in 42 (97.7%) of 43 *M. tuberculosis* and negative results in all 3 NTM grown in LJ media, thus giving agreement rate of 97.8%. This study demonstrates that the TB Ag MPT64 Rapid kit is simple and rapid with satisfactory accuracy in identification of *M. tuberculosis*. However, further improvement in sensitivity is desirable for cultures grown in liquid media.

OL-005 A study of sociodemographic profile of DOTS patients in relation to acceptability and defaults in RNTCP regimens

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Introduction: Tuberculosis, India accounts nearly 1/3rd of the global burden. Every year approximately 1.8 million persons develop tuberculosis of which about 0.8 million are new smear positive highly infectious cases and about 4.17 lakh people die of TB every year. Prevalence of disease was 4 cases per 1000 population which is 4 times as high as incidence. RNTCP has been commissioned in 1993 using DOTS strategy. Patients diagnosed accurately, drug supply is

regular uninterrupted and there has been sticking increase in proportions of patients cured in DOTs therapy.

Aims and Objectives:

- To study the prevalence of defaults RNTCP regimen.
- To study the socio economic and cultural factors related to defaults.
- To study the acceptability factors in patients successfully receiving treatment.

Methodology: Cross sectional community based study randomly selected with a sample size of 430 patients who are on DOTs. Data collected by interview method during the period of October 2007–March 2008. The study variables are age, sex, literacy, occupation, income, cultural factors, and causes for defaults Using EPI info, percentages and chi square were applied to analyze data.

Results: Majority had heard about tuberculosis 90% and 89.2% (98) perceived to be an infectious agent. 85% (93) knew cough as a symptom more than 3weeks. Nearly 88% (96) perceived tuberculosis to be preventable disease. Most of them belong to low socioeconomic status 81% (89), males 66% (73), illiterates 72% (79) which are statistically associated with default of treatment. Defaults were 22% (24). Majority of defaults by migration felt well, side effects, working hours, far centre, alcohol, inconsistency of drug supply.

Conclusion: Despite facing some stigma and inconvenience, health education regarding DOTs therapy has to improve to reduce defaults and success of programme.

OL-006 Role of polymerase chain reaction in the diagnosis of female genital tuberculosis

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Background: Female genital tuberculosis is a form of extra genital tuberculosis with considerable morbidity and mortality especially in developing countries. The clinical and laboratory diagnosis of this condition is difficult because of the subtle presentation of this condition and lack of sensitive, specific and rapid diagnostic methods. The present study was carried out to evaluate the newer diagnostic methods with conventional laboratory tests.

Methods: Thirty clinically suspected cases of female genital tuberculosis were included in the study. From each patient, endometrial biopsy sample was collected for the laboratory studies. One part of endometrial biopsy sample was used for histopathological study and another part for acid-fast staining, culture on Lowenstein–Jensen medium, culture in BACTEC medium and Polymerase Chain Reaction (PCR) for detection of *Mycobacterium tuberculosis* DNA using MPB64 primer.

Results: In histopathology, granulation tissue with epithelioid cells was seen in 5 (16.7%) cases and chronic inflammation without granuloma was seen in 10 (33.3%) cases. Only 1 (3.3%) patient showed positivity in direct microscopy while 2 (6.7%) patients were positive for culture on Lowenstein–Jensen medium. Culture on BACTEC showed positivity in 4 (13.4%) cases. 7 (23.3%) were positive by PCR. The cases that were positive by direct microscopy, culture on Lowenstein–Jensen medium and BACTEC culture were also positive by PCR.

Conclusions: Newer diagnostic methods like BACTEC culture and PCR showed better sensitivity and specificity than the conventional laboratory methods. They also gave results rapidly as compared to conventional culture methods. Hence, these methods can be of value in the diagnosis of female genital tuberculosis.